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Complete if Known

Application Number	10/507,387
Filing Date	09/10/04
First Named Inventor	Dipankar SEN
Art Unit	
Examiner Name	
Attorney Docket Number	CDM/2353-0010

(Use as many sheets as necessary)

Sheet 1 of 13

U. S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet **2** of **13****Complete If Known**

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/JZ/		GIESE, BERND - Long-Distance Charge Transport in DNA The Hopping Mechanism - Acc. Chem. Res. 2000, 33, 631-636 - Department of Chemistry, University of Basel, St. Johannis-Ring 19, CH-4056 Basel, Switzerland	
		SCHUSTER, GARY B. - Long-Range Charge Transfer in DNA: Transient Structural Distortions Control the Distance Dependence - Acc. Chem. Res. 2000, 33, 253-260 - School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, Georgia 30332	
		KELLEY, SHANA O.; HOLMLIN, R. ERIK; STEMPEL, ERIC D.A. and BARTON, JACQUELINE K. - J. Am. Chem. Soc. 1997, 119, 9861-9870 - Beckman Institute, Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, CA 91125	
		GIESE, BERND and WEGGELY, STEFAN - The Influence of Mismatches on Long-Distance Charge Transport Through DNA - Angew. Chem. Int. Ed. 2000, 39 No. 19 - Wiley-VCH Verlag GmbH, D-69451 Weinheim, 2000	
V		BOON, ELIZABETH M.; CERES, DONATO M.; DRUMMOND, THOMAS G.; HILL, MICHAEL G.; and BARTON, JACQUELINE K. - Mutation Detection by Electrocatalysis at DNA-Modified Electrodes - Division of Chemistry and Chemical Engineering, CA Inst. of Tech., Pasadena, CA 91125	

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10/07/2008		HALL, DANIEL B. and BARTON, JACQUELINE K. - Sensitivity of DNA-Mediated Electron Transfer to the Intervening -Stack: A Probe for the Integrity of the DNA Base Stack - J. Am. Chem. Soc. 1997, 119, 5045-5046 - Division of Chemistry and Chemical Engineering, California Inst. of Tech., Pasadena, CA 91125	
/JZ/		RAJSKA, SCOTT R.; and BARTON, JACQUELINE K. - How Different DNA-Binding Proteins Affect Long-Range Oxidative Damage to DNA - Biochemistry 2001, 40, 5556-5564 - Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, CA 91125	
/JZ/		GASPER, SUSAN M. and SCHUSTER, GARY B. - Intramolecular Photoinduced Electron Transfer to Anthraquinones Linked to Duplex DNA: The Effect of Gaps and Traps on Long-Range Radical Cation Migration - J. Am. Chem. Soc. 1997, 119, 12762-12771 - School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, Georgia 30332	
		KAN, YONGZHI and SCHUSTER, GARY B. - Long-Range Guanine Damage in Single-Stranded DNA: Charge Transport Through a Duplex Bridge and in a Single-Stranded Overhang - Journal of the American Chemical Society - volume 121, Number 47, December 1, 1999	
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Sheet 4

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		PORATH, DANNY; BEZRYADIN, ALEXEY; de VRIES, SIMON; and DEKKER, CEES - Direct Measurement of Electrical Transport Through DNA Molecules - <u>Letters to Nature</u> 2000 Macmillan Magazines Ltd. - Dept. of Applied Sciences, Delft University of Technology, 2628 CJ Delft, The Netherlands	
/JZ/		FINK, HANS-WERNER and SCHOENBERGER, CHRISTIAN - Electrical Conduction Through DNA Molecules - <u>Letters to Nature</u> , 1999 Macmillan Magazines Ltd. - Institute of Physics, University of Basel, Klingelbergstrasse 82, CH-4056 Basel, Switzerland - Vol. 398, 04/01/99	
/JZ/		OKAHATA, YOSHIO, et al. - Anisotropic Electric Conductivity in an Aligned DNA Cast Film - <u>Communications to the Editor</u> - J. Am. Chem. Soc. 1998, 120, 6165-6166 - 1998 American Chemical Society - Dept. of Biomolecular Engineering, Tokyo Inst. of Tech.	
/JZ/		HALL, DANIEL B., et al. - Oxidative DNA Damage Through Long-Range Electron Transfer - <u>Letters to Nature</u> - <u>Nature</u> , Vol. 382, August 22, 1996 - Division of Chemistry and Chemical Engineering, CA. Inst. of Technology, Pasadena, CA 91125	
		NUNEZ, MEGAN E. - Long-Range Oxidative Damage to DNA: Effects of Distance and Sequence - <u>Research Paper</u> - Division of Chemistry and Chemical Eng., CA Inst. of	
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Sheet **5** of **13****Complete If Known**

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Filing Date	09/10/04
First Named Inventor	Dipankar SEN
Art Unit	
Examiner Name	
Attorney Docket Number	CDM/2353.0010

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		(con't.) Technology, Pasadena, CA 91125	
/JZ/		BIXON, M., et al. - Long-Range Charge Hopping in DNA - PNAS, October 12, 1999, Vol. 96, No. 21, pp. 11713-11716 - School of Chemistry, Tel Aviv Univ. Ramat Aviv, Tel Aviv 69978, Israel	
/JZ/		SAITO, ISAO, et al. - Photoinduced DNA Cleavage Via Electron Transfer: Demonstration That Guanine Residues Located 5' to Guanine are the Most Electron-Donating Sites - J. Am. Chem. Soc. 1995, 117, 6406-6407	
/JZ/		GOLD, LARRY, et al. - Diversity of Oligonucleotide Functions - Annu. Rev. Biochem. 1995, 64:763-97	
/JZ/		HERMANN, THOMAS and PATEL, DINSHAW J. - Adaptive Recognition by Nucleic Acid Aptamers - Science's Compass Review - 02/04/00, Vol. 287, SCIENCE	
		RAJSKA, SCOTT R., et al. - Protein-Modulated DNA Electron Transfer - 1999 American Chemical Society	
/JZ/		AICH, PALOK, et al. - M-DNA: A Complex Between Divalent Metal Ions and DNA Which Behaves as a Molecular Wire - J. Mol. Biol. (1999) 294, 477-485 - Article No. jmbi.1999.3234	

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Sheet 6

of 13

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First Named Inventor	Dipankar SEN
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/JZ/		PEATIE, DEBRA A. - Direct Chemical Method for Sequencing RNA - Proc. Natl. Acad. Sci. USA, Vol. 76, No. 4, pp. 1760-1764, April 1979 Biochemistry - Department of Biochemistry and Molecular Biology, Harvard University, Cambridge, Massachusetts 02138	
		WANG, WEI-KUNG, et al. - Molecular Biology of Human Immunodeficiency Virus Type 1 - Institute of Microbiology, College of Medicine, National Taiwan Univ.	
/JZ/		PUGLISI, JOSEPH D. et al. - Conformation of the TAR RNA-Arginine Complex by NMR Spectroscopy - Science Vol. 257, July 3, 1992	
		BATTISTE, JOHN L. - Binding of an HIV Rev Peptide to Rev Responsive Element RNA Induces Formation of Purine-Purine Base Pairs - 1194 American Chemical Society - Biochemistry	
/JZ/		ODOM, DUNCAN T. and BARTON, JACQUELINE K. - Long-Range Oxidative Damage in DNA/RNA Duplexes - Biochemistry 2001, 40, 8727-8737 - American Chem. Soc.	
/JZ/		LILLEY, DAVID M. J. - All Change at Holliday Junction - Proc. Natl. Acad. Sci. USA, Vol. 94, pp. 9513-9515, September 1997	

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/JZ/		HUIZENGA, DAVID E., et al. - A DNA Aptamer That Binds Adenosine and ATP - Biochemistry 1995, 34, 656-665 1995 American Chemical Society	
		LIN, CHIN H. and PATEL, DINSHAW J. - Structural Basis of DNA Folding and Recognition in an AMP-DNA Aptamer Complex: Distinct Architectures But Common Recognition Motifs for DNA and RNA Aptamers Complexed to AMP - Cellular Biochemistry and Biophysics Program, Memorial Sloan-Kettering Cancer Center, New York, NY 10021	
/JZ/		ODOM, DUNCAN T., et al. - Robert Charge Transport in DNA Double Crossover Assemblies - Research Paper - Chemistry & Biology 2000, 7:475-481 - Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, CA 91125	
/JZ/		TELSER, JOSHUA - DNA Duplexes Covalently Labeled at Two Sites: Synthesis and Characterization by Steady-State and Time-Resolved Optical Spectroscopies - J. Am. Chem. Soc. 1989, 111, 7226-7232 - 1989 American Chemical Society	

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/JZ/		Author Unknown - Amine-Reactive Probes - Molecular Probes - Product Information - Revised: 12/08/03	
/JZ/		HALL, DANIEL B., et al. - Oxidative DNA Damage Through Long-Range Electron Transfer - Letters to Nature - Nature, Vol. 382, 08/22/96 - Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, CA 91125	
/JZ/		NUNEZ, MEGAN E; HALL, DANIEL B.; and BARTON, JACQUELINE K. - Long-Range Oxidative Damage to DNA: Effects of Distance and Sequence - Research Paper, Chemistry & Biology, February 1999, 6:85-97	

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/JZ/		GRINSTAFF, MARK W. - How Do Charges Travel Through DNA? - An Update on a Current Debate - Highlights, Angew. Chem. Int. Ed. 1999, 38, No. 24 - WILEY-VCH Verlag GmbH, D-69451 Weinheim, 1999	
/JZ/		SAITO, ISAO - Mapping of the Hot Spots for DNA Damage by One-Electron Oxidation: Efficacy of GG Doublets and GGG Triplets as a Trap in Long-Range Hole Migration - J. Am. Chem. Soc. 1998, 120, 12686-12687 - 1998 American Chemical Society	

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Sheet

10

of

13

Complete If Known

Application Number

10/507,387

Filing Date

09/10/04

First Named Inventor

Dipankar SEN

Art Unit

Examiner Name

Attorney Docket Number

CDM/2353.0010

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/JZ/		WELLINGER, R. J. and SEN, D. - <i>The DNA Structures at the Ends of Eukaryotic Chromosomes</i> - <i>European Journal of Cancer</i> , Vol. 33, No. 5, pp. 735-749, 1997	
/JZ/		SIMONSSON, TOMAS - <i>G-QUADRUPLEX DNA STRUCTURES - VARIATIONS ON A THEME</i> - <i>Biol. Chem.</i> , Vol. 382, pp. 621-628, April 2001, Medical Research Council, Laboratory of Molecular Biology, Hills Road, Cambridge CB2 2QH, UK	
/JZ/		GIESE, BERND, et al. - <i>Direct Observation of Hole Transfer Through DNA By Hopping Between Adenine Bases and By Tunnelling</i> - <i>Letters to Nature</i> , Nature, Vol. 412, July 19, 2001 Macmillan Magazines Ltd.	

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11

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/JZ/		NAKATANI, KAKUHIKO, et al. - N2-Phenyldeoxyguanosine: Modulation of the Chemical Properties of Deoxyguanosine toward One-Electron Oxidation in DNA - J. Am. Chem. Soc. 2002, 124, 6802-6803 - Department of Synthetic Chemistry and Biological Chemistry, Faculty of Engineering, Kyoto University	
/JZ/		SAITO, ISAO, et al. - Photoinduced DNA Cleavage via Electron Transfer: Demonstration That Guanine Residues Located 5' to Guanine Are the Most Electron-Donating Sites - J. Am. Chem. Soc. 1995, 117, 6406-6407 - 1995 American Chemical Society	

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		SZALAI, VERONIKA A. and THORP, H. HOLDEN <i>Electron Transfer in Tetrads: Adjacent Guanines Are Not Hole Traps in G. Quartets</i> - 2000 American Chemical Society - Dept. of Chemistry, Univ. of North Carolina at Chapel Hill, Chapel Hill, NC 27599-3290	
	132	WANG, YONG, et al. - RNA Molecules That Specifically and Stoichiometrically Bind Aminoglycoside Antibiotics with High Affinities - <i>Biochemistry</i> 1996, 35, 12338-12346, 1996 American Chemical Society - Dept. of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, 250 Longwood Avenue, Boston, Massachusetts 02115	
	137	MAO, CHENGDE, et al. - A Nanomechanical Device Based on the B-Z Transition of DNA - <i>Letters to Nature</i> , Nature, Vol. 397, January 14, 1999 - 1999 Macmillan Magazines Ltd.	

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		SOUKUP, GARRETT A. and BREAKER, RONALD R. - <u>Allosteric Nucleic Acid Catalysts</u> - Department of Molecular, Cellular and Developmental Biology, Yale University, New Haven, Connecticut 06520-8103	
		KELLEY, SHANA, et al. - <u>Weitreichender Elektronentransfer durch DNA-Filme</u> - 1999, pp. 991-996, ZUSCHRIFTEN, WILEY-VCH Verlag GmbH, D-69451 Weinheim, 1999	

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